Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, the method comprising the steps of:

~~(a)~~ representing the first end of a segment of the plurality of segments with a partition compression code word, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

~~(b)~~ compressing a remaining portion of the segment.

2. (Currently Amended) The method of claim 1 further comprising the step of:

~~(c)~~ repeating the representing and compressing steps ~~(a)~~ and ~~(b)~~ for each of a remaining portion of the plurality of segments.

3. (Original) The method of claim 1 wherein the first end is a start of the segment.

4. (Original) The method of claim 1 wherein the partition compression code word represents a partition command sequence.

5. (Currently Amended) The method of claim 4 wherein the representing step ~~(a)~~ further includes the step of:

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(a1)———providing a compound compression code word to represent the partition command sequence and another portion of the segment, the partition command sequence representing the first end of the segment.

6. Canceled

7. Canceled

8. (Currently Amended) A method for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, a dictionary being used in compressing the data, the method comprising the steps of:

(a)———representing the first end of a segment of the plurality of segments with a partition compression code word, the partition compression code word representing a partition command sequence, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

(b)———adding bytes to a string including the command sequence representing the first end of the segment until the string does not have a match in the dictionary;

(c)———adding a code word to the dictionary, the code word including the partition command sequence as a root, the code word representing the string if the string is obtained in a first iteration;

(d)———utilizing the code word in the dictionary to represent the string if the string is not obtained in the first iteration;

(c) compressing a remainder of the segment, if any.

9. (Currently Amended) A method for transmitting data using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, a dictionary being used in compressing the data, the method comprising the steps of:

(a) representing the first end of a segment of the plurality of segments with a partition compression code word, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

(b) transmitting the partition compression code word; and

(c) compressing a remaining portion of the segment;

(d) transmitting the remaining portion of the segment.

10. (Currently Amended) A method for transmitting data using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, the method comprising the steps of:

(a) representing the first end of a segment of the plurality of segments with a transparent mode command, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

(b) transmitting the transparent mode command; and

(c) transmitting a remaining portion of the segment.

11. (Currently Amended) A system for compressing data for transmission using asynchronous

transfer mode (ATM), the data including a plurality of segments, each of the plurality of

segments including a first end and a second end, the system comprising:

means for representing the first end of a segment of the plurality of segments with a

partition compression code word, the segment being at least one of an ATM cell, an ATM PDU

and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

and

means for compressing a remaining portion of the segment.

12. (Original) The system of claim 11 wherein the first end is a start of the segment.

13. (Original) The system of claim 11 wherein the partition compression code word represents a

partition command sequence.

14. (Original) The system of claim 13 wherein the representing means further includes means

for:

providing a compound compression code word to represent the partition command

sequence and another portion of the segment, the partition command sequence representing the

first end of the segment.

15. Canceled

16. Canceled

17. (Currently Amended) A system for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, a dictionary being used in compressing the data, the system comprising:

means for representing the first end of a segment of the plurality of segments with a partition compression code word representing a partition command sequence, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

means for adding bytes to a string including the first end of the segment until the string does not have a match in the dictionary;

means for adding a code word to the dictionary, the code word including the partition command sequence as a root, the code word representing the string if the string is obtained in a first iteration;

means for utilizing the code word in the dictionary to represent the string if the string is not obtained in the first iteration;

means for compressing a remainder of the segment, if any.

18. (Currently Amended) A system for transmitting data using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, the system comprising the steps of:

means for representing the first end of a segment of the plurality of segments with a transparent mode command, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

means for transmitting the transparent mode command and a remaining portion of the segment.

19. (Currently Amended) A computer-readable medium containing a program for compressing data for transmission using asynchronous transfer mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, the program including instructions for:

(a)——representing the first end of a segment of the plurality of segments with a partition compression code word, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

(b)——compressing a remaining portion of the segment.

20. (Currently Amended) A computer-readable medium containing a program for compressing data for transmission using asynchronous transform mode (ATM), the data including a plurality of segments, each of the plurality of segments including a first end and a second end, a dictionary being used in compressing the data, the program including instructions for:

(a)——representing the first end of a segment of the plurality of segments with a partition compression code word, the partition compression code word representing a partition command sequence, the segment being at least one of an ATM cell, an ATM PDU and an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

(b)——adding bytes to a string including the first end of the segment until the string does not have a match in the dictionary;

(c)——adding a code word to the dictionary, the code word including the partition

command sequence as a root, the code word representing the string if the string is obtained in a

first iteration;

(d)——utilizing the code word in the dictionary to represent the string if the string is not

obtained in the first iteration;

(e)——compressing a remainder of the segment, if any.

21. (Currently Amended) A computer-readable medium containing a program for transmitting

data using asynchronous transfer mode (ATM), the data including a plurality of segments, each

of the plurality of segments including a first end and a second end, a dictionary being used in

compressing the data, the program including instructions for:

(a)——representing the first end of a segment of the plurality of segments with a partition

compression code word, the segment being at least one of an ATM cell, an ATM PDU and an IP

packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

(b)——transmitting the partition compression code word;

(c)——compressing a remaining portion of the segment; and

(d)——transmitting the remaining portion of the segment.

22. (Currently Amended) A computer-readable medium containing a program for transmitting

data using asynchronous transfer mode (ATM), the data including a plurality of segments, each

of the plurality of segments including a first end and a second end, the program including

instructions for:

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(a) representing the first end of a segment of the plurality of segments with a

transparent mode command, the segment being at least one of an ATM cell, an ATM PDU and

an IP packet, the first end being a boundary of the ATM cell, the ATM PDU or the IP packet;

(b) transmitting the transparent mode command; and

(c) transmitting a remaining portion of the segment.